Propagation Scheme - Physical Model

Crystal Fiber Structures

- crystal lattices reveal gradients dependent on direction, which leads to anisotropic light transport inside the medium (birefringence)
- the propability for redistribution of a photon in a particular direction is given by the phase function model yielded from Rayleigh scattering:

$$P(\omega) = \frac{T(\omega)}{\int_{k\pi}^{(k+1)\pi} T(\omega)\, d\omega}$$

$$\textit{with} \int_0^{\pi} P(\omega) = 1.$$

- each tensor is then a unique footprint: $t_{i,j} \mapsto T(\omega)$